

Appln. No. 10/997,378
Response dated July 11, 2006
Reply to Office Action of April 20, 2006

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REMARKS/ARGUMENTS

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Claims 1-14 and 16-26 are pending. Claims 1-14 and 16-26 are pending.

THE §103(a) REJECTION

Claims 1, 3, 5-14, 16-20 and 22 and 24-26 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mackey, U.S. Pat. No. 5,670,553 (Mackey herein). Claims 1, 3, 5-14, 16-20 and 22 and 24-26 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mackey in view of in view of WO 98/25985, which correlates to U.S. Pat. No. 6,169,124 (Horn herein). Claim 23 has been rejected under 35 U.S.C. §103(a) as being unpatentable over Mackey in view of Horn.

In rejecting the Claims the Office Action referred to the previous Office Action in which the following assertion was made, "an IMR enhancer component (the carboxylic acid described beginning at column 3, line 33 may be viewed as an enhancer component". In the present Office Action, the Examiner has rejected the previously submitted argument of the applicant that the specification defines the IMR enhancing compound as being a liquid petroleum oil. In doing so, the present Office Action states, "examiner disagrees because the instant claim language requires the presence of an IMR enhancer compound, and column 3, lines 9-31 of Mackey describes the IMR enhancing effects of certain carboxylic acids." From the Examiner's statement, Applicants presume that Examiner's argument is that IMR enhancer broadly encompasses the carboxylic acid (component "a" of Mackey, col. 3, lines 9-11).

Applicants have now amended independent Claims 1 and 17 to require that the IMR enhancer compound is a liquid petroleum oil. Mackey fails to describe or suggest an IMR enhancer other than a carboxylic acid. A carboxylic acid is not a liquid petroleum oil (see previous Response). Since Mackey fails to describe all the

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elements of the independent Claims, Macky without more is insufficient to make a *prima facie* case of obviousness. That is there can be no suggestion without a description either inherently or explicitly within the the prior art, which Macky does not do. For this reason, independent Claims 1 and 17 are non-obvious over Mackey.

Likewise, Claim 20 has been amended to require an internal mold release agent comprising a fatty acid condensation product that has at least one active hydrogen containing group. Since Mackey fails to describe such a compound, a *prima facie* case of obviousness can not be made by Mackey. With regard to the rejection over Mackey or Mackey in view of Clatty, independent Claim 7 is non-obvious as presented below.

As to the Examiner's rejection combining Mackey with Horn, the basic contention of the Examiner is that "Horn et al. teach that mineral oils are suitable in combination with other mold release agents . . . [and] it would have been obvious to one of ordinary skill in the art to incorporate mineral oil into the composition of Mackey in order to enhance mold release properties".

Amended Claim 1 now requires "an internal mold release agent consisting of a fatty acid condensation product" and that the IMR enhancer consists of a petroleum oil. Since Mackey clearly describes the necessity of using a fatty acid (component "a") with a fatty acid condensation product (component "b") as necessary to create a synergistic internal mold release, the combination as now required by amended Claim 1 is taught away from by Mackey regardless of what Horn teaches. That is, Mackey's internal mold release in combination with mineral oil as taught by Horne would not render the invention of Amended Claim 1. Further, it is surprising that an internal mold release agent of the fatty acid condensation product merely combined with a petroleum oil as in the Examples results in such a synergistic mold release. Consequently, Amended Claim 1 and Claims dependent therefrom are non-obvious of Mackey in view of Horn.

Similarly, Claim 17 now requires that "the fatty acid condensation product has at least one active hydrogen containing group" and the IMR enhancer compound is a petroleum oil. Since neither Mackey nor Horne describe such a fatty acid condensation product, the combination of these references can not render the

Appln. No. 10/997,378
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invention and as such a *prima facie* case of obviousness has not been made. Consequently Claim 17 is non-obvious.

To reiterate, Claim 20 has been amended to require an internal mold release agent comprising a fatty acid condensation product that has at least one active hydrogen containing group. Since Mackey fails to describe such a compound, a *prima facie* case of obviousness has not been made by Mackey because Horn has not added anything other than "mineral oil" as described above. Consequently, Mackey fails to describe such a compound with or without Horne and as such, a *prima facie* case of obviousness has not been made by Mackey or Mackey combined with Horne. Thus, Claim 20 and Claims dependent therefrom are non-obvious.

Claims 2, 4 and 21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mackey in view of Clatty, U.S. Pat. No. 4,751,252 (Clatty herein). Claims 2, 4 and 21 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Mackey in view of Horn and further in view of Clatty.

With regard to the rejection in view of Clatty of Claims 2, 4 and 21 (note, Applicants believe this is also applicable to Claim 7), these Claims are non-obvious over Mackey in view of Clatty as follows. Mackey fails to describe mixing a fatty acid condensation product that has an active hydrogen containing group with an isocyanate to make the foam. In particular, the invention of Claim 7 requires reacting the isocyanate with an internal mold release agent that has already been reacted to form a condensation product, but still retains an active hydrogen in the presence of a non-reactive internal mold release agent (i.e., petroleum oil). In other words, the condensation product is, if you will, not completely reacted. Mackey in contrast does not describe mixing with the isocyanate "A" side of the system. (col. 5, lines 22-37). Mackey further states, "the carboxylic acid compound and the fatty polyester, fatty acid ester or fatty amide component are generally not reacted prior to their addition to the B side of the reaction as no reaction of these two components is desired." From this it is clear that Mackey only teaches that the Mackey's mold release compositions are added to the "B" side and that no reaction of these components is desired.

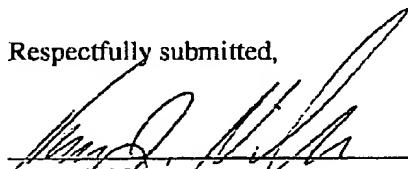
Clatty was cited by the Examiner to stand for the contention that known internal mold release agents may be added to Clatty's fire retardant polyisocyanates (col. 3, lines 30-38). To reiterate, Mackey teaches that the isocyanate

Appn. No. 10/997,378
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is not mixed with the "A" isocyanate side and the reaction of the fatty acid, fatty polyester, fatty acid esters or fatty amide is not desired (note, none of the esters or amides are described as containing an active hydrogen that react with the isocyanate in the foam reaction). Nevertheless, Applicants, recognize that internal mold release agents have been mixed with the "A" isocyanate side as described by Clatty, which predates Mackey by almost 10 years. Applicants, however, do not see how any person of ordinary skill in the art would combine Mackey with a general teaching from any art, much less art that is almost 10 years preceding Mackey, to do exactly what Mackey explicitly teaches against for their internal mold release agents (only mix with "B" side, because no reaction is desired). For this reason, Claims 2, 4, 7 and 21 are non-obvious over Mackey alone or Mackey in view of Clatty. Note, the citation of Horn adds nothing more than the use of mineral oil as described above.

Considering the foregoing reasons, Claims 1-14 and 16-26 are patentable. Applicants, therefore, respectfully request withdrawal of all rejections and allowance of Claims 1-14 and 16-26.

Respectfully submitted,



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